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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,762	05/11/2001	Dietmar Stoiber	STOIBER-5	7123

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EXAMINER
MOHANDESI, IRAJ A

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/831,762	STOIBER, DIETMAR	
	Examiner	Art Unit	
	Iraj A Mohandesi	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *11 May 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 May 2001* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-17,19,22-27,29 are rejected under 35 U.S.C. 102(b) as being anticipated by **Heidelberg DE 4029271. Heidelberg** discloses a winding core for use in a linear motor, comprising a, yoke having protruding teeth that define slots for receiving at least one winding, wherein each tooth has a yoke-proximal portion and yoke-distal portion, wherein the yoke-proximal portion has in a direction perpendicular to a movement direction of the linear motor a lateral dimension which is greater than a lateral dimension of the yoke-distal portion (Fig 1. column 1 line 12-65 and column 2 line 9-15,) , wherein the dimension of the yoke proximal portion on one side is greater by about 5% than the dimension of the yoke-distal portion, wherein the dimension of the yoke proximal portion on each side is greater by up to 5% than the dimension of the yoke-distal portion (Fig. 1 the dimension of yoke proximal is at least at one location greater by about 5% and at other location is greater by up 5%),] the teeth are arranged in symmetry in a direction perpendicular to the movement direction of the linear motor (column 1 line 1-10 teaches the equal continuing neighboring teeth),each tooth is formed with at least one shoulder to thereby widen the dimension of the yoke-proximal portion(Fig. 1) wherein each tooth is formed with a slanted transition between the yoke-proximal portion and the Yoke-distal portion and the yoke-distal portion is connected to the yoke-proximal portion by a continually extending transition(Fig. 1), further comprising a primary part (rotor 4, Fig. 1,column 3 ,line 50), and a secondary part (stator 6, Fig.1 column 3 line 46).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18,20,21,28,30,31are rejected under 35 U.S.C. 103(a) as being unpatentable over **Heidelberg DE 4029271** and in view of **Ono 5,742,136.**

DE 4029271. Heidelberg discloses a winding core for use in a linear motor, comprising a, yoke having protruding teeth that define slots for receiving at least one winding, wherein each tooth has a yoke-proximal portion and yoke-distal portion, wherein the yoke-proximal portion has in a direction perpendicular to a movement direction of the linear motor a lateral dimension which is greater than a lateral dimension of the yoke-distal portion (Fig 1. column 1 line 12-65 and column 2 line 9-15,) , wherein the dimension of the yoke proximal portion on one side is greater by about 5% than the dimension of the yoke-distal portion, wherein the dimension of the yoke proximal portion on each side is greater by up to 5% than the dimension of the yoke-distal portion (Fig. 1 the dimension of yoke proximal is at least at one location greater by about 5% and at other location is greater by up 5%),] the teeth are arranged in symmetry in a direction perpendicular to the movement direction of the linear motor (column 1 line 1-10 teaches the equal continuing neighboring teeth),each tooth is formed with at least one shoulder to thereby widen the dimension of the yoke-proximal portion(Fig. 1) wherein each tooth is formed with a slanted transition between the yoke-proximal portion and the Yoke-distal portion and the yoke-distal portion is connected to the yoke-proximal portion by a continually extending transition(Fig. 1), further comprising a primary part (rotor 4, Fig. 1,column 3 ,line 50), and a secondary part (stator 6, Fig.1 column 3 line 46).

However **Heidelberg DE 4029271** fails to teach a winding for a linear motor having a yoke-distal portion of each tooth begins at a location which is distant from the yoke by not more then half a tooth length and the yoke has a lateral dimension which corresponds to the dimension of the yoke-proximal Portion of each tooth and the yoke has a lateral dimension witch corresponds over entire length to the lateral dimension of the yoke-proximal of each tooth.

Ono 5,742,136 teaches a winding for a linear motor having a yoke-distal portion of each tooth begins at a location which is distant from the yoke by not more then half a tooth length and the yoke has a lateral dimension which corresponds to the dimension of the yoke-proximal portion of each tooth and the yoke has a lateral dimension witch corresponds over entire length to the lateral dimension of the yoke-proximal of each tooth (Fig .2 a).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine **Heidelberg DE 4029271** motor with a yoke having a yoke-distal portion of each tooth that begins at a location which is distant from the yoke by not more then half a tooth length and has a lateral dimension which corresponds to the dimension of the yoke-proximal portion of each tooth further has a lateral dimension witch corresponds over entire length to the lateral dimension of the yoke-proximal of each tooth for the purpose of reducing the magnetic flux density in the tooth and reduce the hysterics loss as consequence of smaller tooth mass.

Communication

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is (703)305-3242. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this

application or proceeding is assigned are (703) 872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

I.M September 1, 2002

NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800